Customer Number: 000959

Attorney's Docket Number 101-024



Declaration, Petition and Power of Attorney for Patent Application

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

METHOD OF TREATING ARTHRITIS USING LENTIVIRAL VECTORS IN GENE THERAPY

the specification of which:	
is attached hereto.	
X was filed on October 15, 2003	201
X Application Serial No. 10/688780	as:
and was amended on	
(if applicable)	'

I do not know and do not believe that the subject matter of this application was known or used by others in the United States or patented or described in a printed publication in any country before my invention thereof, or patented or described in a printed publication in any country or in public use or on sale in the United States more than one year prior to the date of this application, or first patented or caused to be patented or made the subject of an inventor's certificate by me or my legal representatives or assigns in a country foreign to the United States prior to the date of this application on an application filed more than twelve months (six months if this application is for a design) before the filing of this application; and I acknowledge my duty to disclose information of which I am aware which is material to the examination of this application, that no application for patent or inventor's certificate on the subject matter of this application has been filed by me or my representatives or assigns in any country foreign to the United States, except those identified below, and that I have reviewed and understand the contents of the specification, including the claims as amended by any

I acknowledge the duty to disclose to the Office all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, §1.56.

CLAUR OF BENEFIT OF EARLIER FOREIGN APPLICATION(S)

I hereby claim priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below, and have also identified below any foreign application(s) for patent or inventor's certificate filed by me on the same subject matter having a filing date before that of the application(s) from which priority is claimed.

Check one:

X no such applications have been filed.

_ such applications have been filed as follows

EARLIEST FOREIGN APPLICATION(S), IF ANY, FILED WITHIN 12 MONTHS (6 MONTHS FOR DESIGN) PRIOR TO THIS U.S. APPLICATION

Country	Dinny Con Attrication		FICATION
Country Application Number		Date of Filing (month,day,year)	Priority Claimed Under 35 USC 119
			Yes No
			Yes No
			_ Yes No _
			Yes No
			Yes No

AL	L FOREIGN APPLICATION(S), IF ANY FILED MORE THAN 12 MONTHS (6 MONTHS FOR DESIGN) PRIOR TO THIS U.S. APPLICATION
I hosek	CLAIM FOR BENEFIT OF U.S. PROVISIONAL APPLICATION(S)

I hereby claim the benefit under 35 U.S.C. §119(e) of any United States provisional

(Application Serial No.)	April 17, 2001 (Filing Date)		
(Application Serial No.)	(Filing Date)		

COMPLETE UP EAKLIER U.S./PCT APPLICATION(S)

I hereby claim the benefit under Title 35, United States Code, §120 of any earlier United States application(s) or PCT international application(s) designating the United States listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the earlier application(s) in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose to the Office all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, §1.56 which became available between the filing date(s) of the earlier application(s) and the national or PCT international filing date of this application. As to subject matter of this application which is common to my earlier application(s), if any, described below, I do not know and do not believe that the same was known or used by others in the United States or patented or described in a printed publication in any country before my invention thereof, or patented or described in a printed publication in any country or in public use or on sale in the United States more than one year prior to the date(s) of said earlier application(s), or first patented or caused to be patented or made the subject of an inventor's certificate by me or my legal representatives or assigns in a country foreign to the United States prior to the date(s) of said earlier application(s) on an application filed more than twelve months (six months if this application is for a design) before the filing of said earlier application(s), and I acknowledge that no application for patent or inventor's certificate on said subject maner has been filed by me or my representatives or assigns in any country foreign to the United States except those identified

PCT/US02/08711 (Application Serial No.)	March 21, 2002 (Filing Date)	Pending (Status) (patented,pending,aband.)
PCT/US02/08600 (Application Serial No.)	March 19, 2002 (Filing Date)	Pending (Status)
BONED ON		(patented, pending, aband.)

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorneys and/or agents to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

James E. Cockfield Thomas V. Smurzynski Ralph A. Loren Giulio A. DeConti, Jr. Elizabeth A. Hanley Amy E. Mandragouras Anthony A. Laurentano Kevin J. Canning Jane E. Remillard DeAnn F. Smith Jeanne M. DiGiorgio Megan E. Williams Jeremiah Lynch David J. Rikkers	Reg. No. 19,162 Reg. No. 24,798 Reg. No. 29,325 Reg. No. 31,503 Reg. No. 33,505 Reg. No. 36,207 Reg. No. 38,220 Reg. No. 35,470 Reg. No. 38,872 Reg. No. 36,683 Reg. No. 41,710 Reg. No. 43,270 Reg. No. 43,270 Reg. No. 17,425 Reg. No. 43,882	Maria C. Laccotripe Zacharakis Debra J. Milasincic David R. Burns Sean D. Detweiler Cynthia L. Kanik Theodore R. West Hathaway P. Russell John S. Curran Lisa M. DiRocco Danielle L. Herritt Merideth C. Arnold Peter W. Dini Cynthia M. Soroos Jonathan M. Sparks Andrina M. Zink John D. Lanza	Limited Recognition Under 37 C.F.R. § 10.9(b) Reg. No. 46,931 Reg. No. 46,590 Reg. No. 42,482 Reg. No. 37,320 Reg. No. 47,202 Reg. No. 46,488 Reg. No. 50,445 Reg. No. 51,619 Reg. No. 51,619 Reg. No. 52,568 Reg. No. 52,568 Reg. No. 53,623 Reg. No. 53,624 Reg. No. 54,539 Reg. No. 64,0660

Senu Correspondence to Customer Number: 000959 whose address is:

LAHIVE & COCKFIELD, LLP, 28 State Street, Boston, MA 02109

Direct Telephone Calls to:

Jane E. Remillard, Esq., (617) 227-7400

Wherefore I petition that letters patent be granted to me for the invention or discovery described and claimed in the attached specification and claims, and hereby subscribe my name to said specification and claims and to the foregoing declaration, power of attorney, and this petition.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole or first inventor		
Robert Pawliuk Inventor's signature	Date	
Residence	-ac	
62 Hume Avenue, Medford, MA 02155 Cirizenship		
Canada		
Post Office Address (if different) Same as above		

Full name of second inventor, if any Philippe Leboulch	
Inventor's signature	Date 2 1 ()
Residence	+/26/06
197 Eighth Street, Unit 729, Charlestown, MA 02129	
Citizenship Charlestown, MA 02129	
France	
Post Office Address (if different)	
Same as above	

Customer Number: 000959

Attorney's Docket <u>Number IOI-024</u>



Declaration, Petition and Power of Attorney for Patent Application

a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

METHOD OF TREATING ARTHRITIS USING LENTIVIRAL VECTORS IN GENE THERAPY

the specification of which:	
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X was filed on October 15, 2003	as:
X Application Serial No. 10/688780	·
and was amended on	
(if applicable)	

I do not know and do not believe that the subject matter of this application was known or used by others in the United States or patented or described in a printed publication in any country before my invention thereof, or patented or described in a printed publication in any country or in public use or on sale in the United States more than one year prior to the date of this application, or first patented or caused to be patented or made the subject of an inventor's certificate by me or my legal representatives or assigns in a country foreign to the United States prior to the date of this application on an application filed more than twelve months (six months if this application is for a design) before the filing of this application; and I acknowledge my duty to disclose information of which I am aware which is material to the examination of this application, that no application for patent or inventor's certificate on the subject matter of this application has been filed by me or my representatives or assigns in any country foreign to the United States, except those identified below, and that I have reviewed and understand the contents of the specification, including the claims as amended by any amendment referred to herein.

I acknowledge the duty to disclose to the Office all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, §1.56.

CLAIM OF BENEFIT OF EARLIER FOREIGN APPLICATION(S)

I hereby claim priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below, and have also identified below any foreign application(s) for patent or inventor's certificate filed by me on the same subject matter having a filing date before that of the application(s) from which priority is claimed.

Ch	eck	on	e:

- X no such applications have been filed.
 - _ such applications have been filed as follows

EARLIEST FOREIGN APPLICATION(S), IF ANY, FILED WITHIN 12 MONTHS (6 MONTHS FOR DESIGN) PRIOR TO THIS U.S. APPLICATION

Country	Application Number	Date of Filing (month,day,year)		Priority Claimed Under 35 USC 119	
			_ Yes	No _	
			_ Yes	No _	
			Yes	No	
			_ Yes	No_	
			_Yes	No _	

ALL FOREIGN APPLICATION(S), IF ANY FILED MORE THAN 12 MONTHS (6 MONTHS FOR DESIGN) PRIOR TO THIS U.S. APPLICATION

CLAIM FOR BENEFIT OF U.S. PROVISIONAL APPLICATION(S)

I hereby claim the benefit under 35 U.S.C. §119(e) of any United States provisional application(s) listed below.

60/284736	April 17, 2001
(Application Serial No.)	(Filing Date)
(Application Serial No.)	(Filing Date)

CLAIM FOR BENEFIT OF EARLIER U.S./PCT APPLICATION(S)

I hereby claim the benefit under Title 35, United States Code, §120 of any earlier United States application(s) or PCT international application(s) designating the United States listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the earlier application(s) in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose to the Office all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, §1.56 which became available between the filing date(s) of the earlier application(s) and the national or PCT international filing date of this application. As to subject matter of this application which is common to my earlier application(s), if any, described below, I do not know and do not believe that the same was known or used by others in the United States or patented or described in a printed publication in any country before my invention thereof, or patented or described in a printed publication in any country or in public use or on sale in the United States more than one year prior to the date(s) of said earlier application(s), or first patented or caused to be patented or made the subject of an inventor's certificate by me or my legal representatives or assigns in a country foreign to the United States prior to the date(s) of said earlier application(s) on an application filed more than twelve months (six months if this application is for a design) before the filing of said earlier application(s); and I acknowledge that no application for patent or inventor's certificate on said subject matter has been filed by me or my representatives or assigns in any country foreign to the United States except those identified herein.

PCT/US02/08711	March 21, 2002	Pending
(Application Serial No.)	(Filing Date)	(Status)
		(patented, pending, aband.)
PCT/US02/08600 (Application Serial No.)	March 19, 2002 (Filing Date)	Pending (Status) (patented,pending,aband.)

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorneys and/or agents to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

James E. Cockfield	Reg. No. 19,162	Maria C. Laccotripe Zacharakis	Limited Recognition
Thomas V. Smurzynski	Reg. No. 24,798		Under 37 C.F.R. § 10.9(b)
Ralph A. Loren	Reg. No. 29,325	Debra J. Milasincic	Reg. No. 46,931
Giulio A. DeConti, Jr.	Reg. No. 31,503	David R. Burns	Reg. No. 46,590
Elizabeth A. Hanley	Reg. No. 33,505	Sean D. Detweiler	Reg. No. 42,482
Amy E. Mandragouras	Reg. No. 36,207	Cynthia L. Kanik	Reg. No. 37,320
Anthony A. Laurentano	Reg. No. 38,220	Theodore R. West	Reg. No. 47,202
Kevin J. Canning	Reg. No. 35,470	Hathaway P. Russell	Reg. No. 46,488
Jane E. Remillard	Reg. No. 38,872	John S. Curran	Reg. No. 50,445
DeAnn F. Smith	Reg. No. 36,683	Lisa M. DiRocco	Reg. No. 51,619
Jeanne M. DiGiorgio	Reg. No. 41,710	Danielle L. Herritt	Reg. No. 43,670
Megan E. Williams	Reg. No. 43,270	Merideth C. Arnold	Reg. No. 52,568
Jeremiah Lynch	Reg. No. 17,425	Peter W. Dini	Reg. No. 52,821
David J. Rikkers	Reg. No. 43,882	Cynthia M. Soroos	Reg. No. 53,623
	_	Jonathan M. Sparks	Reg. No. 53,624
		Andrina M. Zink	Reg. No. 54,539
		John D. Lanza	Reg. No. 40,060

Send Correspondence to Customer Number: 000959 whose address is:

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Direct Telephone Calls to:

Jane E. Remillard, Esq., (617) 227-7400

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Full name of sole or first inventor	,	
Robert Pawliuk		
Inventor's signature //	Date	
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Residence	,	
62 Hume Avenue, Medford, MA 02155		
Citizenship		
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Post Office Address (if different)		
Same as above		

Full name of second inventor, if any		
Philippe Leboulch		
Inventor's signature	Date	
Residence		
197 Eighth Street, Unit 729, Charlestown, MA 02129		
Citizenship		
France		
Post Office Address (if different)		
Same as above		